

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Blue Ridge Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Roanoke Valley Resource Authority
Salem, Virginia
Permit No. BRRO21330

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. Pursuant to 40 CFR Part 70 and 9VAC5 Chapter 80, Roanoke Valley Resource Authority has applied for a permit to the Title V Operating Permit for its Smith Gap Landfill facility. The Department has reviewed the application and has prepared a DRAFT Title V Operating Permit.

Engineer/Permit Contact: _____ Date: DRAFT 11/17/2011
Patrick Corbett
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David J. Brown

Regional Director: _____ Date: _____
Robert J. Weld

FACILITY INFORMATION

Permittee

Roanoke Valley Resource Authority
1020 Hollins Road
Roanoke, Virginia 24012-8011

Facility

Smith Gap Regional Landfill
8484 Bradshaw Road
Salem (Roanoke County), VA 24153-2246

State-County Plant ID No. 51-161-00246

SOURCE DESCRIPTION

NAICS/SIC Code: 562212/4953 – Solid Waste Landfill

The Roanoke Valley Resource Authority (RVRA) owns and operates the Smith Gap Regional landfill, a solid waste landfill. Waste is received at the landfill by rail. The rail cars are emptied and the waste is then loaded into dump trucks for transport to the working face of the sanitary landfill for final disposal.

The facility received a minor new source review permit (dated May 20, 2010) for the voluntary installation of a gas collection and control system (open flare). The facility has no other underlying permits.

The landfill is required to obtain a Title V permit per NSPS Subpart WWW due to the design capacity of the landfill exceeding the thresholds capacity for applicability. After consideration of the NSPS requirements, this source does not emit at major source emission levels for any pollutant.

A permit exemption was issued to the source for an emergency generator on April 21, 1998. The emergency generator was constructed prior to the promulgation of NSPS Subpart IIII. The engine qualifies as an existing engine under MACT Subpart ZZZZ. The MACT does not by itself require a Title V permit; however, the landfill must otherwise have an operating permit. Inclusion of these federally-enforceable applicable requirements is required.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emission units at the facility are reflected in the Title V permit in Sections II (significant units) and VII (insignificant units).

EMISSIONS INVENTORY

Emissions from the facility for 2010 have been reviewed and approved (28.5 TPY NMOC).

EMISSION UNIT APPLICABLE REQUIREMENTS

The following section discusses requirements for the emissions units at the facility that are subject to Title V permitting. These requirements come from the NSR permit and applicable federal requirements. The conditions are not repeated verbatim from the permit. The regulatory authority for each condition is listed in parentheses () below each condition in the permit.

Citations

The following citations denote the underlying authorities to implement the specific conditions in the NSR permits:

9VAC5-50-260, 9VAC5-80-1100, 9VAC5-80-1180, 9VAC5-50-50, 9VAC5-50-20, 9VAC5-50-90, 9VAC5-50-30, 9VAC5-50-410, 9VAC5-60-100

Section III of Title V Permit – Emergency diesel engine (EU4)

Limitations

40CFR63 Subpart ZZZZ contains requirements for emergency engines of all sizes. EU4 is a 250 kW engine that is operated for emergency purposes only. The MACT requires maintenance and operation requirements. The engine is subject to the opacity requirement for new and modified sources (9VAC5-50-80). This engine was exempted from minor new source review requirements in April 21, 1998.

Monitoring and Recordkeeping

The MACT requires fuel, maintenance, and operation requirements that are monitored by fuel certifications, hours of operation, and other forms of recordkeeping. Visible emissions observations are required in any week the engine operates. This monitoring is adequate to determine compliance due to the intermittent nature of testing and operation of an emergency engine.

Streamlined Requirements

None

Section IV of Title V Permit – Landfill and GCCS – NSR permit dated May 20, 2010 (GCCS)

Limitations

The landfill requirements from 40CFR60 Subpart WWW and 40CFR63 Subpart AAAA to require installation of a NSPS compliant flare are in this section; however, based on recent Tier 2 testing the facility is less than the 50 Mg threshold requiring control. The requirements for emissions control for the approved flare (PM-10, NO_x, CO, SO₂) are generated from the NSR permit review. Based on that review, the approved flare is an enclosed flare as represented by RVRA. A no visible emissions limit

(except 5 minutes in 2 hours) is included. All requirements are taken from the NSR permit dated 5/20/10 or the NSPS.

Monitoring and Recordkeeping

Monitoring of the flare includes temperature and landfill gas flowrate. Waste acceptance rates are monitored to determine actual emissions and NSPS requirements. NSPS monitoring and recordkeeping are also included in this section to be used when the flare is required by the NSPS. The proper operation and maintenance requirements as well as temperature and flow monitoring are adequate to determine compliance with the flare requirements.

Testing

Testing is required per the NSPS (40CFR60.752(b)(2)(iii)(B) once the flare is required) with the results being submitted with a required NSPS compliance report. No additional testing is required; however, the DEQ and EPA have the authority to require additional testing in the future.

Reporting

Reports and notifications are required per the NSPS, with some notifications required for the permitted flare. The MACT requires semi-annual reporting instead of annual pursuant to the NSPS.

Streamlined Requirements

The new and modified source opacity requirement (9VAC5-50-80) has been streamlined by the no visible emissions limit for the enclosed flare.

The notification of the actual date construction was commenced (September 10, 2010) was received on September 23, 2010. The notification of the actual start-up date of the GCCS (March 25, 2011) was received on March 31, 2011. These requirements from the NSR permit have not been included in this renewal.

Section V of Title V Permit – 40CFR63 Subpart CCCCCC

The gasoline tank (EU-6b) meets the definition of gasoline dispensing facility. The throughput has been less than the 10,000 gallons per month; therefore, the facility must comply with 40CFR63.11116. This section includes minimizing spills and maintaining records of monthly gasoline throughput. Language in the condition has been used to clarify that exceeding the 10,000 gallon per month throughput will make additional requirements apply to the facility.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9VAC5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

STATE ONLY APPLICABLE REQUIREMENTS

None

FUTURE APPLICABLE REQUIREMENTS

None

INAPPLICABLE REQUIREMENTS

None identified in the application. The facility does not have any applicable requirements for greenhouse gases.

COMPLIANCE PLAN

None

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9VAC5-80-110.

Insignificant emission units are shown in the table contained in Section VI of the permit.

CONFIDENTIAL INFORMATION

No confidential information request has been made. All portions of the Title V permit and application are available for public review.

PUBLIC PARTICIPATION

The draft permit will be published in the Roanoke Times on November 18, 2011. The public comment period ran from November 18, 2011 to December 19, 2011.